

Use Attainability Analysis

for

WBID 3311 Mill Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

RECEIVED

Field Data Sheets for Recreational Use Stream Surveys

6/27 JUL -7 PM 1:58

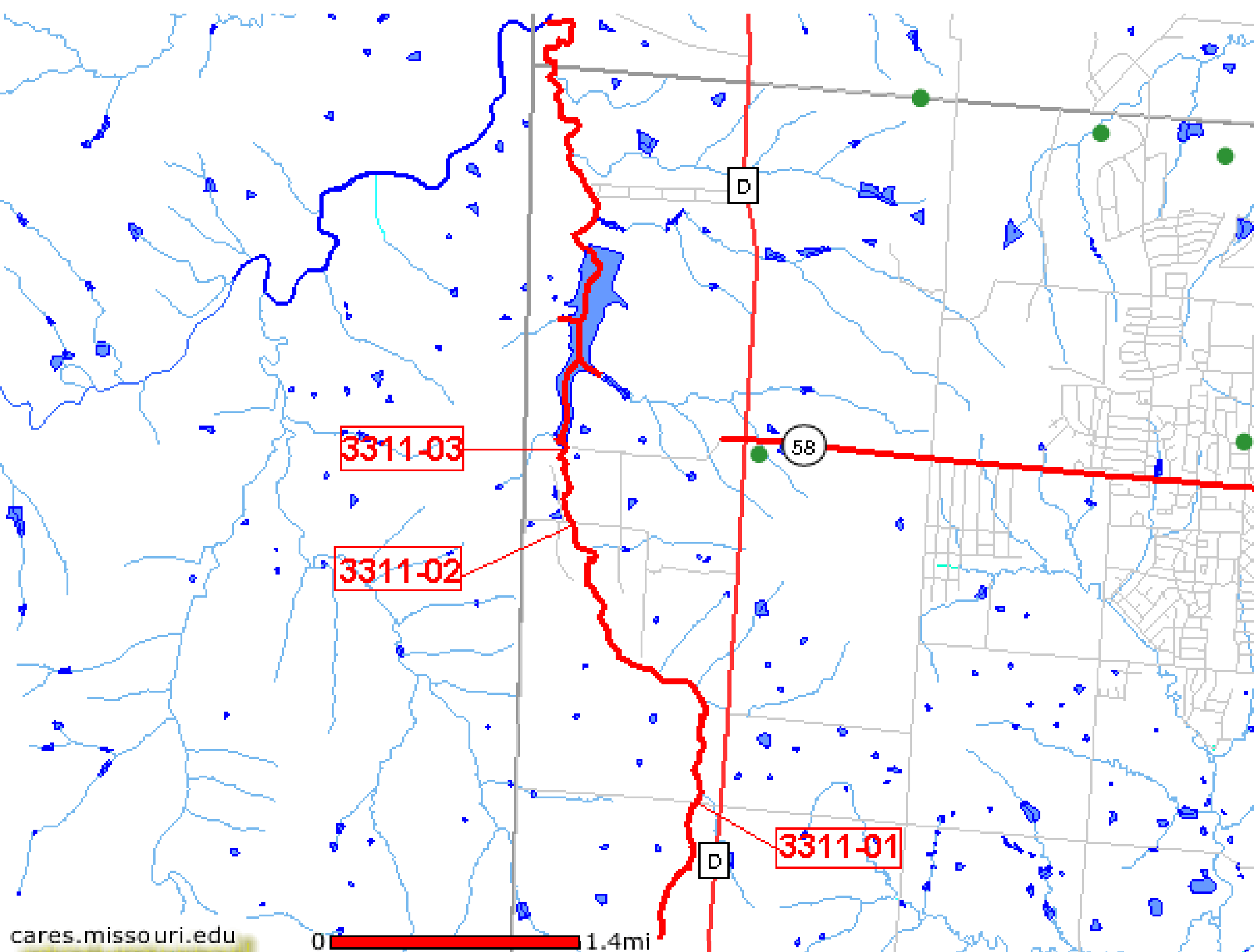
Data Sheet A - Water Body Identification

WATER PROTECTION PROGRAM

| | | | |
|--|----------------------------------|--------------|--|
| Water Body Name: (from USGS 7.5' quad) | Mill Creek | | |
| 8-digit HUC: | 10300101 | | |
| Missouri WBID #: | 3311 | | |
| County: | Cass | | |
| Upstream Legal Description: | Mill Creek and 187 th | | |
| Downstream Legal Description: | Mill Creek and Stonehaven | | |
| Upstream Coordinates: (UGS 84, ddd.ddddd) | N. 38.78881 | W. 094.58976 | |
| Downstream Coordinates: (UGS 84, ddd.ddddd) | N. 38.81683 | W. 094.60420 | |
| Discharger Facility Name(s): | Sneads Barbecue | | |
| Discharger Permit Number(s): | MO0118214 | | |
| Number of Sites Evaluated: | 3 | | |
| Name of Surveyor and Telephone Number: | Michael Cunningham 816-622-7016 | | |
| Organization: | MDNR / MCRO | | |
| Position: | E.S. 1 | | |

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Michael A. Cunningham Date: 6/28/05



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|--|--|-----------------|
| Missouri WBID #: <u>3311</u> | Site Location Description: | |
| Site GPS Coordinates: <u>N. 38.78881</u> <u>W. 94.58976</u> | <u>Mill CK + 187th</u> | |
| Date & Time: <u>6/28/05 @ 8:10</u> | Facility Name: <u>Sneads Barbeque</u> | |
| Personnel: <u>M. Cunningham</u> | Permit Number: <u>MO0118214</u> | |
| Current Weather Conditions: <u>70°F + Rain</u> | Weather Conditions for Past 7 days: <u>Hot + Humid</u> | |
| Photo Ids: Upstream: <u>1, 2, 3</u> | Downstream: <u>4, 5, 6</u> | Other: <u>—</u> |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|---|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use*:

| | | | | |
|---|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: <u>None</u> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|----------------------|---|-----------------------------------|-----------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>6</u> | Length (ft): <u>4</u> | Avg. Depth (ft): <u>1/2</u> | Max. Depth (ft): <u>1/2</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions:

| | | | | |
|--|-----------------------|---|-----------------------------------|---------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>10</u> | Length (ft): <u>20</u> | Avg. Depth (ft): <u>1</u> | Max. Depth (ft): <u>2</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|
| <u>40</u> % Cobble | <u>10</u> % Gravel | <u>0</u> % Sand | <u>0</u> % Silt | <u>50</u> % Mud/Clay | <u>0</u> % Bedrock |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

None observed.

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|---------------------------------|---|--|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Melissa A. C. J. L. Date: 6/28/05
 Organization: MDNR / MCRO Position: E. S. I

3311_001 DS



3311_001 DS



3311_001 DS



3311_001 US



3311 001 US



3311_001 US



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | | |
|---|-------------------------------|--|--|
| Missouri WBID #: <u>3311</u> | | Site Location Description: <u>02</u> | |
| Site GPS Coordinates: <u>N. 38.81093</u> <u>W. 094.60331</u> | | <u>Mill Creek + 177th 175th</u> | |
| Date & Time: <u>6/24/05 @ 8:30</u> | | Facility Name: <u>Sneads Barbeque</u> | |
| Personnel: <u>M. Cunningham</u> | | Permit Number: <u>MO 0118214</u> | |
| Current Weather Conditions: <u>70°F + sprinkles</u> | | Weather Conditions for Past 7 days: <u>Rain AM otherwise hot + humid</u> | |
| Photo Ids: Upstream: <u>7, 8, 9</u> | Downstream: <u>10, 11, 12</u> | Other: <u>15</u> | |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|---|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input checked="" type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: <u>Mowed field to West</u> | |

Evidence of Human Use*:

| | | | | |
|---|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: <u>None</u> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|--|-----------------------------------|-----------------------------|---------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Run | Width (ft): <u>8</u> | Length (ft): <u>20</u> | Avg. Depth (ft): <u>1/2</u> | Max. Depth (ft): <u>2</u> |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | | |

Downstream View Physical Dimensions:

| | | | | |
|--|--|-----------------------------------|---------------------------|---------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>7</u> | Length (ft): <u>20</u> | Avg. Depth (ft): <u>2</u> | Max. Depth (ft): <u>4</u> |
| <input checked="" type="checkbox"/> Flow | Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|
| <u>50</u> % Cobble | <u>10</u> % Gravel | <u>0</u> % Sand | <u>0</u> % Silt | <u>10</u> % Mud/Clay | <u>0</u> % Bedrock |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|--|
| <u>- some Algal growth</u> <u>- Banks mostly grass still covered.</u> |
|--|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|---------------------------------|---|--|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input checked="" type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 6/28/05
 Organization: MDNR/KCRO Position: E.S. I

3311_002 DS



3311_002 DS



3311_002 DS



3311_002 US



3311_002 US



3311_002 US



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | |
|---|--|
| Missouri WBID #: 3311 | Site Location Description: 03 |
| Site GPS Coordinates: N. 38.31653 W. 094.60420 | Mill Creek + Stonehaven |
| Date & Time: 6/28/05 @ 11:30 | Facility Name: Snacks Barbeque |
| Personnel: M. Cunningham | Permit Number: MO0118214 |
| Current Weather Conditions: 75°F + Most. Cloudy | Weather Conditions for Past 7 days: Rain AM otherwise hot + humid |
| Photo Ids: Upstream: 13, 14, 15 | Downstream: 16, 17, 18 Other: — |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

While no activity was observed, there is a boat dock present with 7 pontoon boats.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|---|--------------------------------------|---|--|--|
| <input checked="" type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input checked="" type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input checked="" type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: | |

Evidence of Human Use*:

| | | | | |
|---|--|---|---|--|
| <input checked="" type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input checked="" type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|-----------------------|---|-----------------------------------|---------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Run | Width (ft): <u>15</u> | Length (ft): <u>150</u> | Avg. Depth (ft): <u>2</u> | Max. Depth (ft): <u>4</u> |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions:

| | | | | |
|--|-------------|---|--|--|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): <u>Too Deep to est.</u> | Max. Depth (ft): <u>Too Deep to est.</u> |
| <input checked="" type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|
| <u>10</u> % Cobble | <u>10</u> % Gravel | <u>0</u> % Sand | <u>0</u> % Silt | <u>80</u> % Mud/Clay | <u>0</u> % Bedrock |
|--------------------|--------------------|-----------------|-----------------|----------------------|--------------------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|--|
| <u>- algal growth</u> <u>- plant growth growing in water.</u> |
|--|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---------------------------------|---|---|--|--|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input type="checkbox"/> Clear | <input checked="" type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input type="checkbox"/> None | <input type="checkbox"/> Other: <u>unable to determine</u> |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Michael A. Cifuentes, Jr. Date: 6/28/05

Organization: MONR / KCRO Position: E.S. I

3311_003 DS



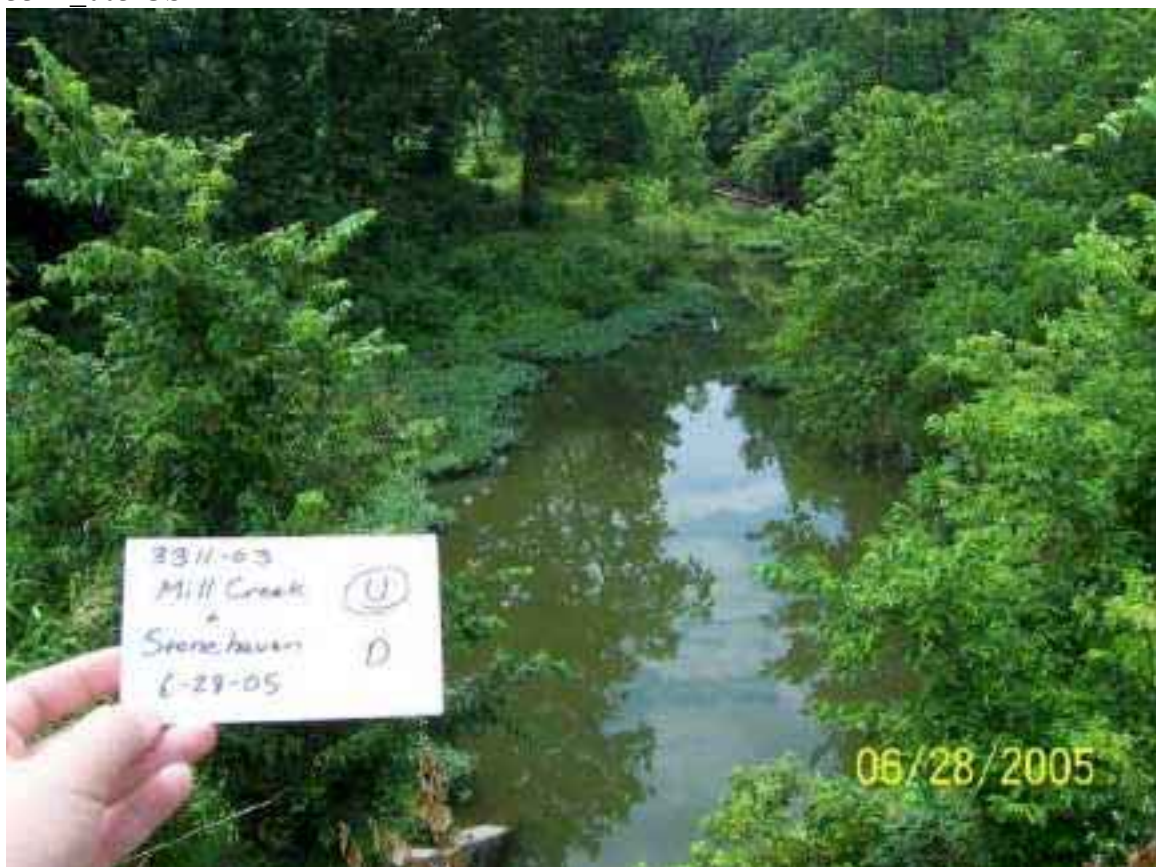
3311_003 DS



3311_003 DS



3311_003 US



3311_003 US



3311_003 US

